

### **AMENDMENTS TO THE SPECIFICATION**

*Please replace paragraph [0003] on page 1 with the following rewritten paragraph.*

[0003] The linear strain of materials, particularly metal, is measured in practice using mechanical or optical extensometers, which measure the elongation of the material between two fixed points on a structure. The measuring points are usually guide marks or dents. These extensometers can ~~be~~ also be used to measure the linear strain of non-metal materials, for example, fractures in concrete structures and the like in buildings. Because of their limited accuracy, these extensometers require that the measuring points be located on the material or the structure far from each other. These distances are in the hundreds of millimeters.

*Please replace paragraph [0005] on page 2 with the following rewritten paragraph.*

[0005] We also know various types of tension meters, such as mechanical, optical, electrical, acoustic, pneumatic ~~and other, etc.~~ The disadvantages of mechanical, optical, acoustic and pneumatic tension meters are similar to those of the above-mentioned microscopes. Electrical tension meters eliminate some of the above drawbacks, but their principal disadvantage is that they are only able to work within the range of certain temperature values. In case of higher or lower temperatures it is necessary to specially adapt the electrical tension meters, increasing their acquisition price many times.

*Please replace paragraph [0006] on page 2 with the following rewritten paragraph.*

[0006] Another weakness of tension meters, especially electrical, is their limited lifetime, which is ~~reduces-reduced~~ proportionately to the climatic conditions under which the measurements are made.

*Please replace paragraph [0007] on page 2 with the following rewritten paragraph.*

[0007] The existing solutions therefore do not basically allow carrying out field measurements to obtain ~~the results of~~ which would be comparable to the results of measurements under laboratory conditions.

*Please replace the heading in paragraph [0008] on page 2 with the following rewritten heading.*

[0008] ~~Disclosure~~ Summary of the Invention

*Please replace paragraph [0009] spanning pages 2 and 3 with the following rewritten paragraph.*

The above weaknesses are to a large extent eliminated by a set for measuring the linear strain of materials, comprising ~~at least~~ at least two measuring elements fitted with measuring blades with parallel measuring-blade axes, attachable to the measured material, and a portable reading device with the impression surface made of a material with dimensional stability and strength lower than the strength of the material of the measuring elements and/or the portable measuring device, based on this invention, featuring measuring blades, fitted with fixtures in the center. The bottom section of the measuring elements is fitted with necks and a tapered end. The measuring elements are attached to the surface of the measured material with a resin-based adhesive.

*Please replace the heading below paragraph [0020] on page 6 with the following rewritten heading.*

~~Best mode for carrying out the invention~~ Detailed Description of the Invention

*Please replace paragraph [0021] on page 6 with the following rewritten paragraph.*

The exemplary set for measuring the linear strain of materials comprises two measuring elements 1, which are attached to the measured material, and a portable reading device 3 with an impression surface 4. The measuring elements 1 are fitted

with measuring blades 2, which are fitted with fixtures 5 in the center; the measuring elements 1 are fixed to the surface of the measured material with the parallel axes of the measuring blades 2. The impression surface 4 of the reading device 3 is made from a material with dimensional stability and hardness lower than the hardness of the material of the measuring elements 1, such as soft metals, e.g. various alloys of lead or various waxes, including dental wax ~~an~~ and the like. The measuring elements 1 are attached to the surface of the measured material using a resin-based adhesive. The adhesives used are resistant to high temperatures and have a long durability.

*Please replace paragraph [0026] on page 8 with the following rewritten paragraph.*

During the measurement of remote strain of materials using this set, impressions of the measuring elements 1, fixed to the surface of the measured material, are created on the impression surface 4 and the accurate distance of the identified points of both impressions is measured in a place distant from the measuring elements 1. Taking into account the shape of the measuring elements ~~2~~1, it is possible to manufacture the measuring elements 1 even from materials with lower mechanical properties. The first pair of impressions is created at the beginning of the measurement, for example prior to the strain; another pair of impressions of the measuring elements 1 is created after a certain period, of time or after a critical stress on the material. The distances of the first pair and the second pair of impressions are then compared. The set therefore comprises a fixed part, consisting of the measuring elements 1 fixed to the measured section of the material, a portable part, consisting of the reading device 3 with the impression surface 4, for creating the impressions of the measuring elements 1; a generally available device for measuring the longitudinal dimensions with the required measurement accuracy is also necessary.

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